

Application No.: 09/898,338
Amendment Dated: January 8, 2004
Reply to Office Action of: October 10, 2003

MTS-3268US

Remarks/Arguments:

Acknowledgment of Priority

The Examiner is respectfully requested to acknowledge a claim for foreign priority and all certified copies of priority documents were received. These documents were mailed October 29, 2002, with the Response to Missing Parts.

Amendments

Claim 1 has been cancelled. The limitation of claim 7 has been incorporated into claim 6, and claim 7 cancelled. Claims 8, 9, 10, 12, and 13 have been amended to change dependency. Claims 8 and 13 have been amended to recite conventional Markush language. Claim 14 was amended to correct an obvious error. Support for newly added claim 17 and 24 is found in Embodiment 2, Experimental Example 1 (pages 41-46 of the specification). Support for newly added claim 18 is found in Embodiment 3 (pages 51-59). Support for newly added claim 19 is found in Embodiment 4 (pages 60-68). Support for newly added claim 20 is found in original claim 3. Support for newly added claim 21 is found in original claim 5. Support for newly added claims 22 and 23 is found in original claim 8. Support for newly added claim 25 is found in original claim 2. It is submitted that no new matter is introduced by these amendments and new claims.

Rejection under 35 USC 102(e)

Claims 1-16 were rejected under 35 USC 102(e) as anticipated by Futamura, U.S. Pat. No. 6,162,894 ("Futamura"). This rejection is respectfully traversed.

Claims 1 and 7 have been cancelled.

Claim 2-6 and 8-18

Futamura discloses a method in which flame-retardant resin material is heated to 300 to 420°C to yield oily substances, which may be used as fuels. Futamura, Abstract. The process involves hydrocracking. Futamura, column 2, line 66, to column 3, line 3.

In applicants' method, the claims recite that the reaction is carried out at a temperature lower than a thermal decomposition temperature of the resin composition. As is discussed in the specification on pages 46 and 47, polystyrene is thermally decomposed at 300°C. Thus, Futamura's process, the resins are heated

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above their decomposition temperatures.

It is axiomatic that for a prior art reference to anticipate under § 102 it has to meet every element of the claimed invention. . . . *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 231 U.S.P.Q. 81, 90 (Fed. Cir. 1980). Therefore, the rejection of claims 2-6 and 8-16 as anticipated by Futamura should be withdrawn.

Claims 6 and New Claim 25

Claim 6 recites that the halogen-containing flame-retardant resin composition is brought into contact with a material mixture containing a dehalogenation material and a dehalogenation promoting material at a temperature lower than the thermal decomposition temperature of the resin composition, by kneading the mixture while applying shear force. This limitation is not disclosed by Futamura.

The Office asserts that grinding would result in kneading while applying shear force. Without agreeing with the Office position, claim 6 has been amended to recite that kneading is carried out by a biaxial kneading extruder, a kneader, or rotation rolls. This limitation is not disclosed by Futamura. For this additional reason, claim 6 is patentable over Futamura.

Claim 25 recites that the step is carried out at 200°C or higher. This limitation is not disclosed by Futamura. In Futamura, the resin is ground and then heated. Grinding and heating do not occur at the same time. Futamura, column 2, lines 54-56. For this additional reason, claim 25 is patentable over Futamura.

New Claims 17-19

New claims 17-19 each recite a method in which one of the constituent materials of the halogen-containing flame-retardant resin composition is recovered. This step is neither disclosed nor suggested by Futamura. As noted above, Futamura heats the flame-retardant resin material to 300 to 420°C and converts them to oily substances, which can be used as fuels. Futamura, Abstract. It is submitted that claims 17-19, and the claims dependent thereon, are patentable over Futamura.

New Claims 20-23

New claims 20 and 21 each recite a list of dehalogenation promoting materials that does not include tetralin. It is submitted that these claims 20-23, and the claims

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dependent thereon, are patentable over Futamura.

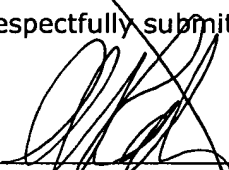
New Claim 24

New claim 24 recites that the resin material is polystyrene. As discussed above, the temperature used in Futamura's method, 300-420°C, is above a temperature at which polystyrene is thermally decomposed. The claims recite that the temperature that is lower than the thermal decomposition temperature. It is submitted that claim 24 is patentable over Futamura.

Conclusion

It is respectfully submitted that the claims are in condition for immediate allowance and a notice to this effect is earnestly solicited. The Examiner is invited to phone applicants' attorney if it is believed that a telephonic or personal interview would expedite prosecution of the application.

Respectfully submitted,



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